

## CLAIMS

1. An antiviral fiber, wherein

fine particles of a metal and/or a metal compound are dispersed

5 in the fiber;

the fiber has a cross-linked structure and a carboxyl group  
in a molecule thereof; and

the fine particles have deactivation effect to a virus and poor  
solubility in water.

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2. The antiviral fiber according to Claim 1, wherein at least a  
part of the carboxyl group exists as a salt.

3. The antiviral fiber according to Claim 1 or 2, wherein the metal  
15 and/or metal compound is at least one kind selected from a group  
consisting of Ag, Cu, Zn, Al, Mg, and Ca, and a metal compound  
thereof.

4. The antiviral fiber according to any one of Claims 1 to 3,  
20 wherein the metal and/or metal compound is included at not less  
than 0.2 mass% as a metal in the fiber component.

5. An antiviral textile product, comprising the antiviral fiber  
according to any one of Claims 1 to 4, in cottony shape, nonwoven  
25 fabric shape, textile shape, paper shape, or knitted fabric shape.

6. The antiviral textile product according to Claim 5, wherein the metal and/or metal compound is included at not less than 0.2 mass% as a metal in whole of the fiber component.

5 7. A method for producing an antiviral fiber, comprising:

bonding a metal ion of a metal having deactivation effect to a virus and poor solubility in water to at least a part of a carboxyl group of a fiber having a cross-linked structure and a carboxyl group in a molecule thereof; and

10 then depositing fine particles of the metal and/or metal compound in the fiber by reduction and/or substitution reaction.

8. The method for producing an antiviral fiber according to Claim 7, comprising:

15 using a fiber, wherein the fiber has a cross-linked acrylic fiber as a basic skeleton and at least a part of a functional group of a molecule of the cross-linked acrylic fiber is hydrolyzed, as the fiber having a cross-linked structure and having a carboxyl group in a molecule thereof;

20 bonding the metal ion of a metal to at least a part of the carboxyl group;

then depositing fine particles of the metal and/or metal compound in the fiber by reduction and/or substitution reaction.